AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims

1. (currently amended) In a communication network having at least a first calling station connected to a first telephonic network and a service-user calling station automatically connected to a packet-based network, an improvement of an assembly for facilitating call connection between the first calling station and the service-user calling station, the service-user calling station having at least a first virtual calling-station identity in the first telephonic network such that the service-user calling station appears virtually resident in the first telephonic network, said assembly comprising:

a virtual-location indexer embodied at the packet-based network, said indexer for automatically indexing together the at least the first virtual calling-station identity of the service-user calling station with a selected packet-based-network identity of the service-user calling station,

the packet-based-network identity automatically associated with logical connection of the service-user calling station to the packet data network and the virtual calling-station identity associated with a virtual residency location of the service-user calling station in the first telephonic network,

said indexer automatically accessed pursuant to call routing of a call between the first calling station and the service-user calling station to permit effectuation of the call connection therebetween, wherein the call connection is local to the first telephonic network, while permitting the first calling station to be physically located at another location.

2. (original) The assembly of claim 1 wherein the service-user calling station is logically connectable to the packet data network at any of a first logical location and at least a second logical location and wherein the selected packet-based-network identity of the service-user calling station is associated with a selected one of the first logical location and the second logical location at which the service-user calling station is connected to the packet data network.

3. (original) The assembly of claim 2 wherein the service-user calling station is moveable, separately connectable at the first logical location and at the at least the second logical location, and wherein the selected packet-based network identity indexed together by said virtual location indexer is updateable responsive to movement and connection of the service-user calling station separately at the first logical location and at the at least the second logical location.

4. (original) The assembly of claim 1 wherein the packet data network comprises a proxy server and wherein said virtual location indexer is embodied at the proxy server.

5. (original) The assembly of claim 1 wherein the packet-based-network identity of the service-user calling station indexed by said virtual location indexer comprises an IP-address.

6. (original) The assembly of claim 5 wherein the service-user calling station operates pursuant to an SIP (session initiation protocol) and wherein the packet-based-network identity of the service-user calling station indexed by said virtual location indexer comprises a SIP IP-address.

7. (original) The assembly of claim 1 wherein the packet-based-network further comprises a gateway that couples the first telephonic network together with the packet-based network wherein a call to the service-user calling station by the first calling station is routed to the gateway and wherein said gateway accesses said virtual location indexer to obtain the selected packet-based network identity of the service-user calling station to route the call thereto.

8. (previously presented) The assembly of claim 7 wherein the first telephonic network comprises a service control point, wherein the gateway is identified by a gateway address, wherein the call to the service-user calling station by the first calling station is caused to be routed by the service control point to the gateway.

9. (original) The assembly of claim 8 wherein the call to the service-user calling station is initiated by the first calling station through entry thereat of the first virtual calling-station identity and wherein the assembly further comprises a database embodied at the service control point, the database comprising a map that maps the first virtual calling-station identity together with the gateway address.

10. (original) The assembly of claim 9 wherein the at least the first virtual calling-station identity of the service-user calling station comprises the first virtual calling-station identity and at least a second virtual calling-station identity and wherein the map formed of said database maps all of the first and at least second calling-station identities of the service-user calling station together

with the gateway address.

11. (original) The assembly of claim 1 wherein the first telephonic network comprises a TDM (time division multiplexed) network having a TDM switch and wherein a call placed by the first calling station to the service-user calling station is routed by the TDM switch to the packet data network and wherein, once delivered to the packet data network, the selected packet-based-network identity indexed together at said virtual location indexer is determined, and the call is routed thereto.

12. (currently amended) In a method of communicating in a communication network having at least a first calling station connected to a first telephonic network and a service-user calling station <u>automatically</u> connected to a packet-based network, an improvement of a method for facilitating call connection <u>automatically</u> between the first calling station and the service-user calling station, the service-user calling station having at least a first virtual calling-station identity in the first telephonic network such that the service-user calling station appears virtually resident in the first telephonic network, said method comprising:

     <u>automatically</u> indexing together the at least the first virtual calling-station identity of the service-user calling station to form an index thereby, the packet-based-network identity <u>automatically</u> associated with logical connection of the service-user calling station to the packet data network and the virtual calling-station identity associated with a virtual residency location of the service-user calling station in the first telephonic network; and

accessing the indexed formed during said operation of indexing pursuant to call routing

of a call between the first calling station and the service user calling station to permit the

automatic effectuation of the call connection therebetween, wherein the call connection is local

to the first telephonic network, while permitting the first calling station to be physically located

at another location.

13. (original) The method of claim 12 further comprising the operation of initiating a call by the

first communication station to the service-user calling station through entry of indicia of a

selected one of the at least the first calling-station identity.

14. (original) The method of claim 13 wherein the communication network comprises a gateway

coupling the first telephonic network with the packet data network, wherein the call initiated

during said operation of initiating is routed to the gateway and wherein said operation of

accessing is performed by the gateway.

15. (original) The method of claim 14 comprising the further operation, subsequent to said

operation of accessing, of routing the call to an address identified in the index accessed during

said operation of accessing to be associated with the at least the first virtual calling-station

identity.

16. (original) The method of claim 12 wherein the service-user calling station is logically

connectable to the packet data network at any of a first logical location and at least a second

logical location and wherein said method further comprises the operation of updating the index

formed during said operation of indexing when the service-user calling station is reconnected out

of one of the first and at least second logical locations and connected into another one of the first

and at least second logical locations.

17. (original) The method of claim 16 wherein the packet data network comprises a proxy server

and wherein the index formed during said operation of indexing is embodied at the proxy server.

18. (original) The method of claim 12 wherein the at least the first virtual calling station identity

comprises the first calling station identity and at least a second virtual calling station identity and

wherein the index formed during said operation of indexing indexes all of the first and at least

second virtual calling stations together with the selected packet-based network identity.

19. (original) The method of claim 17 wherein the first telephonic network further comprises a

service control point and wherein said method further comprises the operation of creating a

database at the service control point, wherein the gateway is identified by a gateway address and

wherein said method further comprises the operation of creating a database having a map that

maps the first virtual calling-station identity together with the gateway address.

20. (original) The method of claim 19 further comprising the operation of accessing the database

to route the call to the gateway.